

## 2. Nicole

**Program Name:** Nicole.java

**Input File:** nicole.dat

Nicole has been studying the Fibonacci sequence and has decided to come up with her own sequence, the "Nicole" series, but different each time based on new values. She decides to see what it would look like if she started with any three numbers and create a fourth one as the sum of the first three, minus 3 each time.

For example, if the first three values are 1, 0 and 4, the fourth value would be  $1+0+4-3$ , which equals 2. The next value would be the sum of 0, 4 and 2, less 3, which would be 3. The next one would be  $4+2+3-3$  which is 6, and so on and on. The first 9 values in the series would be: 1, 0, 4, 2, 3, 6, 8, 14, 25, ...

**Input** - Several data sets of four integers A, B, C, and N, all on one line with single space separation. Each of the set of integers A, B, and C which start a "Nicole" series can be any value within the range -100...100. The fourth integer N ( $2 \leq N \leq 20$ ) indicates the value of that series to output.

**Output** - The Nth value of the "Nicole" series for the three given values.

**Sample data:**

```
1 0 4 9
1 1 2 5
```

**Sample Output:**

```
25
1
```